

Attorney Docket No.: **PENN-0882**  
Inventors: **Dreyfuss and Wang**  
Serial No.: **10/532,203**  
Filing Date: **January 9, 2006**  
Page 4

**REMARKS**

Claims 1-8 are pending in this application. No new matter has been added. Applicants are respectfully requesting reconsideration of the restriction requirement in view of the following remarks.

The claims of the present application have been subjected to a Restriction Requirement under 35 U.S.C. §121 and §372. The Examiner suggests that restriction of the present invention into the following groups is required:

Group I, claims 1-3, drawn to a method of treating a neurodegenerative disease or disorder comprising administering an effective amount of a compound that replaces or enhances the function of SMN to alleviate or reduce a phenotype of cells with low SMN protein levels;

Group II, claims 4 and 8, drawn to a method of identifying a psychopharmacological agent comprising contacting a test cell, which has low SMN protein levels, with a test agent and detecting an ability of said agent to alleviate or reduce a phenotype of said cells, wherein the ability of said agent to alleviate or reduce a phenotype of said cells is indicative of said agent being a psychopharmacological agent;

Group III, claims 5-6, drawn to a method of treating a psychiatric disease or disorder comprising administering an effective amount of a psychopharmacological agent identified by the method of claim 4; and

Group IV, claim 7, drawn to a psychopharmacological composition comprising a psychopharmacological agent identified by the method of claim 4 and a pharmaceutically acceptable carrier.

Attorney Docket No.: **PENN-0882**  
Inventors: **Dreyfuss and Wang**  
Serial No.: **10/532,203**  
Filing Date: **January 9, 2006**  
Page 5

The Examiner asserts that the inventions listed as Groups I, II, III, and IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features. The Examiner suggests that Herbert et al. (U.S. 5,576,328) teach compounds (e.g., compound 25) that replace or enhance the function of SMN to alleviate or reduce a phenotype of cells with low SMN protein levels. The Examiner concludes that no special technical features exists among the different groups because the inventions in Groups I, II, III, and IV fail to make a contribution over the prior art with respect to novelty and inventive step.

The Examiner further suggests that the application contains claims directed to more than one species of the generic invention. Applicants are required to elect a particular compound of formula I, II, or III that replaces or enhances the function of SMN. Alternatively Applicants can elect a particular compound listed in claim 3. Applicants are required to elect a particular neurodegenerative disease or disorder to be treated in the method of group I. Applicants are required to elect a particular test agent to be utilized with the method of group II. Applicants are required to elect a particular psychiatric disease or disorder to be treated in the method of group III. Applicants are required to elect a particular psychopharmacological agent to be utilized with the method of group IV.

The Examiner acknowledges that were Applicants to elect claims directed to the product, and the product claim were subsequently allowed, withdrawn process claims that depend from or otherwise include all limitations of the allowable product

Attorney Docket No.: **PENN-0882**  
Inventors: **Dreyfuss and Wang**  
Serial No.: **10/532,203**  
Filing Date: **January 9, 2006**  
Page 6

claim will be rejoined in accordance with the provisions of MPEP §821.04. Applicants are required to elect one of the Groups and one of the species to be examined. Applicants respectfully disagree and traverse this restriction requirement.

Rule 13.2 indicates that where a group of inventions is claimed in one and the same international application, the requirement of unity of invention referred to in Rule 13.1 shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

Claims set forth in the instant application relate to the special technical feature of use of a compound that replaces or enhances the function of survival motor neuron (SMN). Herbert et al. teach clopidogrel and use thereof in the prevention of prior and acute myocardial infarction, unstable and stable angina, acute reocclusion after percutaneous transluminal coronary angioplasty, restenosis, thrombotic stroke, prior transient ischemic attack, reversible ischemic neurological deficit and intermittent claudication. See column 1, lines 59-67. However, Herbert et al. do not teach or suggest that clopidogrel replaces or enhances the function of SMN. Indeed, the present invention pertains to the treatment of Primary Lateral Sclerosis (PLS), Progressive Muscular Atrophy (PMA), Amyotrophic Lateral Sclerosis (ALS), Alzheimer's disease, Pick's disease, Huntington's disease, Parkinson's disease and SMA, which are distinctly different from the ischemic conditions of Herbert et al. Thus, Herbert et al. do

Attorney Docket No.: **PENN-0882**  
Inventors: **Dreyfuss and Wang**  
Serial No.: **10/532,203**  
Filing Date: **January 9, 2006**  
Page 7

not anticipate the methods of the present invention and therefore unity of invention exists. Accordingly, reconsideration of this Restriction Requirement is respectfully requested.

Moreover, Applicants respectfully disagree with the instant species election requirement. Under PCT Rule 13.2, where a single claim defines alternatives (chemical or non-chemical), the requirement of a technical interrelationship and the same or corresponding special technical features shall be considered to be met when the alternatives are of a similar nature, *i.e.*,

(A) all alternatives have a common property or activity; and

(B)(1) a common structure is present, *i.e.*, a significant structural element is shared by all of the alternatives; or

(B)(2) in cases where the common structure cannot be the unifying criteria, all alternatives belong to a recognized class of chemical compounds in the art to which the invention pertains. See MPEP 1850.

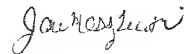
In the present case, the compounds of the present share a common property (*i.e.*, replacing or enhancing the function of SMN) and share highly similar structures. See Formula I, II, and III. Thus, the alternative compounds of the invention have a similar nature and meet the requirement under PCT Rule 13.2. Likewise, the neurodegenerative diseases or disorders of the present invention all share the common property of progressive and irreversible loss of neurons and are all alternatives belonging to an art-recognized class of diseases. See paragraph [0014] citing The Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV) (American Psychiatric Association (1995)). Thus, the alternative neurodegenerative diseases or disorders of the invention also have a similar nature and meet the requirement

Attorney Docket No.: **PENN-0882**  
Inventors: **Dreyfuss and Wang**  
Serial No.: **10/532,203**  
Filing Date: **January 9, 2006**  
Page 8

under PCT Rule 13.2. Accordingly, reconsideration of this species election requirement is respectfully requested.

However, in an earnest effort to be completely responsive, Applicants hereby elect to prosecute Group I, claims 1-3, drawn to a method of treating a neurodegenerative disease or disorder comprising administering an effective amount of a compound that replaces or enhances the function of SMN to alleviate or reduce a phenotype of cells with low SMN protein levels, wherein the species of compound is set forth in Formula II, with traverse.

Respectfully submitted,



Jane Massey Licata  
Registration No. 32,257

Date: **November 17, 2008**

Licata & Tyrrell P.C.  
66 E. Main Street  
Marlton, New Jersey 08053

(856) 810-1515